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Childhood Abuse Experiences and Combat-Related PTSD[1]

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Current literature on the etiology of combat-related PTSD strongly implicates combat trauma exposure as a primary etiological factor. However, studies of premilitary variables have produced conflicting results, perhaps in part due to methodological inconsistencies and failure to employ standardized measures. The present study examines one premilitary variable, childhood physical abuse history. Using a standardized measure developed by child abuse researchers, forty-five percent of veterans with PTSD were identified as recipients of abusive physical punishment during childhood. A positive correlation between physical abuse history and severity of combat-related PTSD was found. These preliminary findings set the stage for further investigation of the child abuse variable and underscore the need for treatment of veterans with combat-related PTSD which addresses developmental traumagenic events.

KEY WORDS: PTSD; premilitary history; physical abuse; abuse assessment.

INTRODUCTION

Etiology of Combat-Related PTSD

Recent etiological studies of combat-related post-traumatic stress disorder (PTSD) have focused on the relative importance of premilitary, mili-

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tary, and post-military factors (Foy *et al.*, 1987b; Kulka *et al.*, 1990; Nace *et al.*, 1981). Several investigators have identified premilitary factors that distinguish veterans with PTSD from veterans free from the disorder (Foy *et al.*, 1984; Keane *et al.*, 1985; Kulka *et al.*, 1988). Studies comparing premilitary and military variables, however, consistently identify the latter as the primary etiological factor (Foy *et al.*, 1987a; Solkoff *et al.*, 1986). Though combat exposure clearly plays an important etiological role, not all those exposed to high levels of war-zone stress develop the disorder and some individuals develop the disorder even under low combat conditions. Thus, combat experiences account for only a portion of the outcome variance and other etiological variables remain to be identified (Foy, 1987b).

One premilitary factor with potentially important ramifications for the development of combat-related PTSD is child abuse. Unfortunately, previous attempts to assess abuse history in veterans with combat-related PTSD have been characterized by methodological inconsistencies and failure to use standardized measures (e.g., Kulka *et al.*, 1990). Investigations by researchers with expertise in the assessment of childhood abuse provide a framework for the study of this premilitary variable in combat-related PTSD.

Issues in the Assessment of Childhood Abuse

A number of recent studies have highlighted the importance of systematic assessment of childhood abuse history by demonstrating striking differences in the reporting rates of abuse as a function of whether or not the clinician directly queries such experiences (e.g., Berger *et al.*, 1988; Briere and Zaidi, 1989; Lanktree *et al.*, 1991). For example, requiring intake clinicians to ask routinely about any history of childhood sexual abuse resulted in a greater than ten-fold increase in the rate of reported abuse among females evaluated in a psychiatric emergency room setting (Briere and Zaidi, 1989). A similar study, conducted in a child psychiatric outpatient clinic, demonstrated that children were four and a half times more likely to report sexual molestation when asked directly (Lanktree *et al.*, 1991).

While these studies underscore the need to assess abuse history directly, the work of Berger and her colleagues (1988) provides guidelines regarding the optimal means of obtaining information regarding physical punishment experiences. Berger (1980) argues that soliciting information regarding specific punishment events and medical consequences of physical discipline enhances reliability of such reports, particularly when the data are collected retrospectively. This approach minimizes the problem of idiosyncratic and subjective definitions of what constitutes physical abuse. Ber-

ger has also demonstrated that many individuals reporting a variety of punitive physical disciplinary experiences fail to label themselves as abused. In other words, these individuals endorse behaviors that constitute abuse but decline to accept the generic label of physical abuse. Thus, not only is it important that we ask about physical abuse, but consideration must also be given to how we ask.

Using a standardized measure of childhood abuse, the present descriptive study yields preliminary data regarding the prevalence and severity of physical discipline experienced during childhood by combat-veterans with PTSD. Secondly, the association between childhood physical discipline and severity of current PTSD symptomatology is examined.

METHODOLOGY

Procedure

The Assessing Environments III questionnaire (Berger *et al.*, 1988) was used to obtain data regarding specific childhood punishment experiences. Severity of PTSD symptomatology was assessed using the Mississippi Scale for Combat-related PTSD (Keane *et al.*, 1988) and the PTSD subscale of the Minnesota Multiphasic Personality Inventory (MMPI; Hathaway and McKinley, 1967). These paper and pencil measures were included as part of a testing packet administered to patients consecutively admitted to the inpatient treatment program of the National Center for PTSD at the Palo Alto VA Medical Center.

Subjects

Twenty-two male subjects ranging in age from 38 to 54 completed the Assessing Environments III questionnaire, the Mississippi Scale for Combat-related PTSD, and the PTSD subscale of the MMPI. The mean age of participants was 42.60 (SD = 1.83). This sample was 64 % Caucasian (N = 14), 18% Hispanic (N = 4), 14% African-American (N = 3), and 1% Asian-American (N = 1). The majority of the sample had been divorced (55%; N = 12) or separated (14% N = 3). Six subjects were currently married (27%) and one subject (4%) had never married. The mean number of children was 1.83 (SD = 2.06) with a range of 0 to 10.

Measures

The Assessing Environments III (AEIII) questionnaire, a standardized measure used by child abuse researchers for more than a decade (Berger, 1981), consists of 10 demographic questions and 155 True-False items that assess aspects of the individual's childhood history, including the occurrence of physical punishment (Berger *et al.*, 1988). Other scales examine aspects of the childhood environment associated with physically abusive families (e.g., social isolation, marital discord, etc.). Questionnaire development followed the rational statistical approach (Loevinger, 1957) for producing a content valid measure. The scales of the AEIII have excellent test-retest reliability, and validity was established by showing that the measure could be used to discriminate abused and nonabused adolescents (Berger *et al.*, 1988).

In keeping with some of the methodological issues raised earlier, the questionnaire does not rely upon subjective, global statements about abuse. Instead, subjects are queried regarding specific, behavioral events (e.g., "When I was bad my parent(s) used to lock me in a closet"; "I required medical attention (at least once) for injuries caused by my parents."

Subject responses to items on the Physical Punishment (PP) Scale (see Table I) have been used (Zaidi *et al.*, 1989; Zaidi, 1990) to identify recipients of Severe Physical Punishment (SPP: endorsement of four or more items on the PP Scale); Mild Physical Punishment (MPP: one to three items on the PP Scale); and No Physical Punishment (NoPP: endorsement of none of the PP items). The designation of Severe Physical Punishment is consistent with other research which indicates that a score of four or more on the AEIII effectively discriminates children identified as abused by protective service agencies from those not so designated (Zaidi *et al.*, 1989). Thus, endorsement of four or more of the PP items provides a behaviorally-anchored definition of childhood physical abuse.

PTSD symptomatology was assessed using two standardized self-report measures. The Mississippi Scale for Combat-related PTSD is a face valid 35-item scale derived from DSM-III-R (1987) criteria (Keane *et al.*, 1988) and the PTSD subscale of the MMPI is a 49-item empirically derived measure of PTSD symptomatology that is less subject to bias or fabrication (Fairbank *et al.*, 1985).

RESULTS

Ten of the twenty-two subjects, or 45 percent, comprised the Severe Physical Punishment (SPP) group by endorsing four or more of the specific

Table I. Scored Physical Punishment Items on the Assessing Environments III Questionnaire

1.	When I was bad, my parent(s) used to lock me in a closet.
2.	I required medical attention (at least once) for injuries caused by my parent(s)
3.	My parent(s) used to punch me when they got angry with me.
4.	I was severely beaten by my parent(s).
5.	My parent(s) used to hit me with something other than their hands when I did something wrong.
6.	My parent(s) used to spank me.
7.	My parent(s) used to kick me when they got angry with me.
8.	When my parent(s) were angry, they sometimes grabbed my by the throat and started to choke me.
9.	When I did something wrong, my parent(s) sometimes tied me up.
10.	I never received any kind of injury from the discipline used by my parent(s). (Score if response is false.)

physical punishment items included on the AEIII PP Scale. Seven veterans, or 32 percent, reported experiencing between one and three physical punishment events and made up the Mild Physical Punishment (MPP) group. Five subjects, or 23%, comprised the No Physical Punishment group (NoPP) after denying physical disciplinary experiences of any kind. The mean Physical Punishment Scale score, which ranged from 0 to 10, was 3.32 (SD = 2.65).

The mean score on the Mississippi Scale for Combat-related PTSD was 132.00 (SD = 17.70) with a range of 103 to 162. The mean raw score on the PTSD subscale of the MMPI was 37.68 (SD = 6.25), with a range of 23 to 48. Physical punishment experiences were significantly correlated with the severity of PTSD symptomatology as measured by the Mississippi Scale for Combat-related PTSD ($p < .05$; $r = .46$) and the PTSD subscale of the MMPI ($p < .05$; $r = .42$)

DISCUSSION

The data reflect a statistically significant correlation between physical punishment history and severity of PTSD symptomatology. Although previous studies with combat-veterans have consistently identified combat exposure as a primary etiological factor, other factors, including specific premilitary variables such as childhood abuse, may contribute to the development and/or severity of combat-related PTSD. Incorporating the methodology and standardized measures advanced by abuse researchers, tools ignored by previous studies of PTSD in combat-veterans, the present

preliminary study demonstrates that 45 percent of patients newly admitted to an inpatient treatment program for combat veterans with PTSD were physically abused during childhood.

Previous investigators have demonstrated that many individuals reporting specific physically abusive experiences fail to label themselves as abused (Berger *et al.*, 1988). The present study suggests that close to twice as many veterans report experiences consistent with a behaviorally-anchored definition of childhood physical abuse as label themselves abused (45% versus 23%). All subjects who labeled punishment received as abusive were members of the SPP group. However, endorsement of this statement did not correspond to specific punishment events or reflect the most disciplinary experiences. It appears, therefore, that study participants employed subjective and idiosyncratic definitions of physical abuse which, in the absence of information regarding specific punishment events, could hinder understanding of long-term consequences of childhood abuse.

Assessing Environments III (AEIII) questionnaire data from two other samples indicate that the measure reliably identifies a relatively large proportion of combat-veterans entering inpatient treatment programs for chronic PTSD as abused. The questionnaire was completed by an additional 63 consecutively admitted patients at the National Center for PTSD and 45 consecutive applicants to the West Los Angeles VA Medical Center. Twenty-four of the 63 participants comprising the second sample at the National Center for PTSD, or 38%, made up the Severe Physical Punishment (SPP) group. Forty-two veterans, or 56%, comprised the Mild Physical Punishment (MPPI) group and only four veterans, or 6%, made up the No Physical Punishment (NoPP) group. The mean AEIII Physical Punishment scale score for this second sample was 3.91 (SD = 2.93). Results obtained at the West Los Angeles VA Medical Center were comparable, with 20 of the 45 subjects comprising the SPP group (44%), sixteen meeting criteria for MPP (36%), and only nine veterans (20%) in the NoPP group. The mean AEIII Physical Punishment scale score for this sample was 3.77 (SD = 2.81).

The data regarding long-term sequelae of physical abuse suggest, moreover, that punishment history and combat exposure may not be wholly independent factors. Green *et al.* (1990) noted that pre-service psychiatric problems predicted placement in more severe combat situations, where exposure to abusive violence and atrocities was likely. Further, it was exposure to "grotesque death" of this kind that emerged as the strongest predictor of PTSD (p. 732). Given data from the child abuse literature which indicates that recipients of abusive childhood treatment are more prone to aggression, antisocial behavior, and deficits in empathy (e.g., Green, 1985; Lamphear, 1985; Oates, 1984; Straker and Jacobson, 1981), it may be that

such individuals are at greater risk for exposure to severe combat and "grotesque death" as described by Green and her colleagues. Thus, further studies should address the association between punishment history and combat exposure.

The demonstrated association between childhood abuse and PTSD severity, coupled with the finding that close to half of the present sample reported physically abusive experiences during childhood, has important implications for diagnosis and treatment of combat veterans. These results suggest that treatment which includes developmental traumagenic events rather than focusing exclusively on combat trauma may be optimal. Addressing the role of pre- and postmilitary stressors is likely to enhance the long-term efficacy of therapy for veterans with combat-related PTSD. Given documentation of multigenerational trends in parenting style which suggests that "abuse begets abuse" (e.g., Gelles and Straus, 1988; Green, 1985; Zaidi *et al.*, 1989), clinicians working with combat-veterans need to consider dynamics within the family of origin and current relationships of combat veterans. Rosenheck (1986) has demonstrated that the children of combat-veterans often report feeling compelled to "walk on eggshells" in order to avoid precipitating angry and aggressive outbursts by their fathers (p. 323). Rosenheck concluded that the legacy of wartime trauma may be, in this manner, passed from one generation to the next. This suggests that family members of combat-veterans with both a history of childhood abuse and a PTSD diagnosis may be at grave risk for maltreatment. Thus, adopting a more comprehensive treatment strategy is likely to benefit the individual veteran as well as those living in proximity to him.

Employing the Assessing Environments III (AEIII) questionnaire has the potential to enhance our understanding of associations between childhood abuse history and combat-related PTSD in at least three ways not yet attempted. First, obtaining subject responses to specific punishment events will enable fine-grained study of associations between these experiences and outcome variables, such as PTSD symptomatology, not possible with abuse defined as a dichotomous variable. Second, the inclusion of other AEIII scales which measure aspects of the childhood environment which have been identified as correlates of abuse may shed light on the mediating role of factors such as community support, economic stability, and family isolation. Third, consideration of the subject's exposure to violence between parents, abuse of siblings, emotional abuse, and sexual abuse will address the etiological significance of a general home atmosphere of violence. Although the AEIII provides adequate assessment of most forms of domestic violence, the present version limits evaluation of sexual abuse experiences to molestation by a parent or by a sibling, thereby omitting consideration of a myriad of other potential perpetrators. An addendum

to the AEIII, which addresses specific sexual abuse experiences by an array of possible perpetrators via a matrix format, is currently under development at the National Center for PTSD.

As noted, this is a preliminary study which suggests a significant correlation between physical abuse and severity of PTSD symptomatology among combat-veterans admitted to an inpatient treatment program. This study does not attempt to examine the relative contributions of physical abuse history and combat exposure. Further, the absence of a control group of combat-veterans without PTSD limits interpretation to the association of child abuse and PTSD *severity* versus PTSD *diagnosis*. A second control group comprised of non-veterans with physically abusive backgrounds would enhance understanding of the interactions of childhood abuse, combat exposure, and chronic PTSD. Despite these limitations, this study does suggest a vital role for assessment of physical abuse history in combat veterans which relies on responses to specific, behaviorally anchored punishment events rather than global and subjective identification of abuse status. Further, given the suggestion of an association between physical abuse history and PTSD severity, treatment efficacy may be enhanced through the use of a comprehensive approach which also addresses the role of childhood trauma. Perhaps the most significant contribution of this work is that it represents a preliminary attempt to bridge the apparent communication gap between child abuse researchers and those working in the area of combat-related trauma.

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